

# RAW SEQUENCE LISTING

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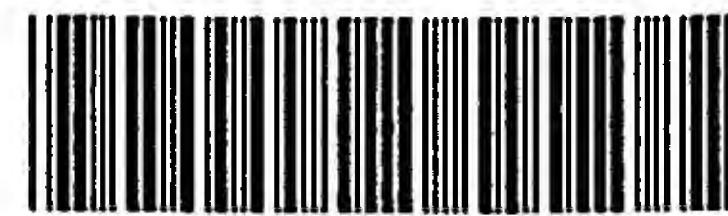
The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/943,443

Source: Jpw1b

Date Processed by STIC: 1/14/02

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/943,443

DATE: 12/23/2008  
TIME: 16:32:02

Input Set : A:\09943443.raw  
Output Set: N:\CRF4\12232008\I943443.raw

1 <110> APPLICANT: ANDERSEN, Peter  
2 NIELSEN, Rikke  
3 OETTINGER, Thomas  
4 RASMUSSEN, Peter Birk  
5 ROSENKRANDS, Ida  
6 WELDINGH, Karin  
7 FLORIO, Walter  
8 <120> TITLE OF INVENTION: NUCLEIC ACIDS FRAGMENTS AND POLYPEPTIDE FRAGMENTS  
9 DERIVED FROM M. TUBERCULOSIS  
10 <130> FILE REFERENCE: 670001-2002.1  
11 <140> CURRENT APPLICATION NUMBER: US 09/943,443  
12 <141> CURRENT FILING DATE: 2001-08-30  
13 <150> PRIOR APPLICATION NUMBER: US/09/050,739  
14 <151> PRIOR FILING DATE: 1998-03-30  
15 <150> PRIOR APPLICATION NUMBER: 0376/97  
16 <151> PRIOR FILING DATE: 1997-04-02  
17 <150> PRIOR APPLICATION NUMBER: 1277/97  
18 <151> PRIOR FILING DATE: 1997-11-10  
19 <150> PRIOR APPLICATION NUMBER: 60/044,624  
20 <151> PRIOR FILING DATE: 1997-04-18  
21 <150> PRIOR APPLICATION NUMBER: 60/070,488  
22 <151> PRIOR FILING DATE: 1998-01-05  
23 <160> NUMBER OF SEQ ID NOS: 173  
24 <170> SOFTWARE: PatentIn Ver. 2.0  
26 <210> SEQ ID NO: 1  
27 <211> LENGTH: 381  
28 <212> TYPE: DNA  
29 <213> ORGANISM: Mycobacterium tuberculosis  
30 <400> SEQUENCE: 1  
31 ggccgcgggt acctatgtgg ccgccgatgc tgcggacgcg tcgacctata cgggttctg 60  
32 atcgaaccct gctgaccgag aggacttgg atgtcgaaa tcatgtacaa ctaccccgcg 120  
33 atgttgggtc acgccgggaa tatggccgga tatgccggca cgctgcagag cttgggtgcc 180  
34 gagatcgccg tggagcaggc cgcggtgcag agtgcgtggc agggcgatac cgggatcacg 240  
35 tatcaggcgt ggcaggcaca gtggaaccag gccatggaag atttggtgcg ggcctatcat 300  
36 gcgatgtcca gcacccatga agccaacacc atggcgatga tggcccgca caccgcccga 360  
37 gcccggcaaat gggcggtca g 381  
39 <210> SEQ ID NO: 2  
40 <211> LENGTH: 96  
41 <212> TYPE: PRT  
42 <213> ORGANISM: Mycobacterium tuberculosis  
43 <400> SEQUENCE: 2  
44 Met Ser Gln Ile Met Tyr Asn Tyr Pro Ala Met Leu Gly His Ala Gly  
45 1 5 10 15

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46 Asp Met Ala Gly Tyr Ala Gly Thr Leu Gln Ser Leu Gly Ala Glu Ile
47           20          25          30
48 Ala Val Glu Gln Ala Ala Leu Gln Ser Ala Trp Gln Gly Asp Thr Gly
49           35          40          45
50 Ile Thr Tyr Gln Ala Trp Gln Ala Gln Trp Asn Gln Ala Met Glu Asp
51           50          55          60
52 Leu Val Arg Ala Tyr His Ala Met Ser Ser Thr His Glu Ala Asn Thr
53           65          70          75          80
54 Met Ala Met Met Ala Arg Asp Thr Ala Glu Ala Ala Lys Trp Gly Gly
55           85          90          95
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58 <211> LENGTH: 467
59 <212> TYPE: DNA
60 <213> ORGANISM: Mycobacterium tuberculosis
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63 gcgacggcgt cataaaccgg gacggcacct tggggcggg ccccgccgtg ctgacgcccgg 120
64 acgagtacaa ctccggctg gtggccggccg acccgagtc caccggcgccg ttgcccacg 180
65 ggcggggct ggtcggtctg gatggcaccc tcactgccga actcgaagcc gagggctggg 240
66 ccaaagatcg catccgcgaa ctgcaagagc tgcttaagtc gaccgggctg gacgttccg 300
67 accgcattccg ggtggtgatg tcgggtgcctg cgaaacgcga agactgggcg cgacccatc 360
68 gcgacctcat tgccggagaa atcttgcta ccgacttcga attcgccgac ctcgcccgt 420
69 gtgtggccat cggcgacggc gtgcgggtaa gcatcgaaaa gacctga                  467
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72 <211> LENGTH: 108
73 <212> TYPE: PRT
74 <213> ORGANISM: Mycobacterium tuberculosis
75 <400> SEQUENCE: 4
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77     1          5          10          15
78 Leu Val Val Leu Asp Gly Thr Val Thr Ala Glu Leu Glu Ala Glu Gly
79     20         25          30
80 Trp Ala Lys Asp Arg Ile Arg Glu Leu Gln Glu Leu Arg Lys Ser Thr
81     35         40          45
82 Gly Leu Asp Val Ser Asp Arg Ile Arg Val Val Met Ser Val Pro Ala
83     50         55          60
84 Glu Arg Glu Asp Trp Ala Arg Thr His Arg Asp Leu Ile Ala Gly Glu
85     65         70          75          80
86 Ile Leu Ala Thr Asp Phe Glu Phe Ala Asp Leu Ala Asp Gly Val Ala
87     85         90          95
88 Ile Gly Asp Gly Val Arg Val Ser Ile Glu Lys Thr
89     100        105
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92 <211> LENGTH: 889
93 <212> TYPE: DNA
94 <213> ORGANISM: Mycobacterium tuberculosis
95 <400> SEQUENCE: 5
96 cgggtctgca cggatccggg ccgggcaggg caatcgagcc tggatccgc tgggtgcgc 60
97 acatcgccga cccgtgcgcg gtacggtcga gacagcggca cgagaaagta gtaaggcga 120

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98 taataggcgg taaagagtag cggttacgac aacgccacag 180
99 cggccagtga ggagcagcgg gtgacggaca tgaacccgga tattgagaag gaccagacct 240
100 ccgatgaagt cacggtagag acgacctccg tcttcgcgc agacttcctc agcgagctgg 300
101 acgctcctgc gcaagcgggt acggagagcg cggctccgg ggttggaaaggg ctcccggcgg 360
102 gctcggtttt gctggtagtc aaacgaggcc ccaacgcgg gtcgggttc ctactcgacc 420
103 aagccatcac gtcggcttgtt cggcatcccg acagcgacat atttctcgac gacgtgaccg 480
104 tgagccgtcg ccatgctgaa ttccggtgtt aaaacaacga attcaatgtc gtcgatgtcg 540
105 ggagtctcaa cggcacctac gtcaaccgcg agcccgttga ttcggcggtt ctggcgaacg 600
106 gcgacgaggt ccagatcgcc aagttccgggt tgggtttttt gaccggaccc aagcaaggcg 660
107 aggatgacgg gagtaccggg ggcccgttgg cgcacccgat agccccgcgc tggccggat 720
108 gtcgatcggtt gcggtcctcg acctgctacg accggattttt cctgatgtca ccatctccaa 780
109 gattcgattt ttggaggctg agggtcttgtt gacgccccgg cgggcctcat cgggttatcg 840
110 gcggttcacc gcatacgact ggcacggct gcgattcatt ctcactgcc 889

112 <210> SEQ ID NO: 6
113 <211> LENGTH: 162
114 <212> TYPE: PRT
115 <213> ORGANISM: Mycobacterium tuberculosis
116 <400> SEQUENCE: 6
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118 1 5 10 15
119 Val Thr Val Glu Thr Thr Ser Val Phe Arg Ala Asp Phe Leu Ser Glu
120 20 25 30
121 Leu Asp Ala Pro Ala Gln Ala Gly Thr Glu Ser Ala Val Ser Gly Val
122 35 40 45
123 Glu Gly Leu Pro Pro Gly Ser Ala Leu Leu Val Val Lys Arg Gly Pro
124 50 55 60
125 Asn Ala Gly Ser Arg Phe Leu Leu Asp Gln Ala Ile Thr Ser Ala Gly
126 65 70 75 80
127 Arg His Pro Asp Ser Asp Ile Phe Leu Asp Asp Val Thr Val Ser Arg
128 85 90 95
129 Arg His Ala Glu Phe Arg Leu Glu Asn Asn Glu Phe Asn Val Val Asp
130 100 105 110
131 Val Gly Ser Leu Asn Gly Thr Tyr Val Asn Arg Glu Pro Val Asp Ser
132 115 120 125
133 Ala Val Leu Ala Asn Gly Asp Glu Val Gln Ile Gly Lys Phe Arg Leu
134 130 135 140
135 Val Phe Leu Thr Gly Pro Lys Gln Gly Glu Asp Asp Gly Ser Thr Gly
136 145 150 155 160
137 Gly Pro

139 <210> SEQ ID NO: 7
140 <211> LENGTH: 898
141 <212> TYPE: DNA
142 <213> ORGANISM: Mycobacterium tuberculosis
143 <400> SEQUENCE: 7
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145 ataaccactc ttccgcctt gaatgccagt gttggccagg cgctggcctg gcgtccacgc 120
146 cacacaccgc acagattagg acacgcccggc ggcgcagccc tgcccggaaag accgtgcacc 180
147 ggtcttgcca gactgtgccc atggcacaga taaccctgca aggaaacgcg atcaataccg 240
148 tcggtgagct acctgctgca ggatccccgg ccccgccctt caccctgacc gggggcgatc 300

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149 tgggggtgat cagcagcgac cagttccggg gtaagtccgt gttgctgaac atcttccat 360
150 ccgtggacac accggtgtgc gcgacgagtg tgcgaacctt cgacgagcgt gcggcggcaa 420
151 gtggcgctac cgtgctgtgt gtctcgaagg atctgccgtt cgcccagaag cgcttctgcg 480
152 gcccggaggg caccgaaaac gtcatgcccgtc cgtcggcatt ccgggacagc ttccggcagg 540
153 attacggcgt gaccatcgcc gacgggcca tggccggct gtcgcccgc gcaatcgtgg 600
154 tgatcggcgc ggacggcaac gtcgcctaca cggaaattggt gccggaaatc gcgcaagaac 660
155 ccaactacga agcggcgctg gccgcgctgg gcgccttaggc tttcacaagg cccgcgcgtt 720
156 cggcgagcag cgacgattt cgacgctgc tcccggaaag cgcctcggtg gtcttggccc 780
157 ggcggtataa caggtgcagg tcgtgctccc acgtgaaggc gatggcaccg tggatctgaa 840
158 gagcggagcc ggccataaac acaaagggtt ccgcggctcg cgccttcgccc agcggcgc 898
160 <210> SEQ ID NO: 8
161 <211> LENGTH: 165
162 <212> TYPE: PRT
163 <213> ORGANISM: Mycobacterium tuberculosis
164 <400> SEQUENCE: 8
165 Met Ala Gln Ile Thr Leu Arg Gly Asn Ala Ile Asn Thr Val Gly Glu
166 1 5 10 15
167 Leu Pro Ala Val Gly Ser Pro Ala Pro Ala Phe Thr Leu Thr Gly Gly
168 20 25 30
169 Asp Leu Gly Val Ile Ser Ser Asp Gln Phe Arg Gly Lys Ser Val Leu
170 35 40 45
171 Leu Asn Ile Phe Pro Ser Val Asp Thr Pro Val Cys Ala Thr Ser Val
172 50 55 60
173 Arg Thr Phe Asp Glu Arg Ala Ala Ser Gly Ala Thr Val Leu Cys
174 65 70 75 80
175 Val Ser Lys Asp Leu Pro Phe Ala Gln Lys Arg Phe Cys Gly Ala Glu
176 85 90 95
177 Gly Thr Glu Asn Val Met Pro Ala Ser Ala Phe Arg Asp Ser Phe Gly
178 100 105 110
179 Glu Asp Tyr Gly Val Thr Ile Ala Asp Gly Pro Met Ala Gly Leu Leu
180 115 120 125
181 Ala Arg Ala Ile Val Val Ile Gly Ala Asp Gly Asn Val Ala Tyr Thr
182 130 135 140
183 Glu Leu Val Pro Glu Ile Ala Gln Glu Pro Asn Tyr Glu Ala Ala Leu
184 145 150 155 160
185 Ala Ala Leu Gly Ala
186 165
188 <210> SEQ ID NO: 9
189 <211> LENGTH: 1054
190 <212> TYPE: DNA
191 <213> ORGANISM: Mycobacterium tuberculosis
192 <400> SEQUENCE: 9
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194 acgcggacga ccacagatc ggtcatcgcc taaggctacc gttctgaccc ggggctgcgt 120
195 gggcgccgac gacgtgaggc acgtcatgtc tcagcggccc accgccccct cggtcgcccgg 180
196 cagtatgtca gcatgtgcag atgactccac gcagccttgcgt tcgcacatcggtt ggtgtcgtgg 240
197 ttgcgacgac cttggcgctg gtgagcgcac ccggccggcgg tcgtgccgcg catgcggatc 300
198 cgttttcgga catcgccgtc gtttcgctc gcggcacgca tcaggcttct ggtcttggcg 360
199 acgtcggtga ggcgttcgtc gactcgctta cctcgcaagt tggcggcgg tcgattgggg 420

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200 tctacgcggtaactaccacca gcaagcgacg actaccgcgc gagcgcgtca aacggttccg 480
201 atgatgcgag cgcccacatc cagcgcaccc tcgcccagctg cccgaacacc aggattgtgc 540
202 ttggtggtcta ttgcgcagggt gcgcacggta tcgatttgc cacctcggcg atgccgccc 600
203 cggtggcaga tcatgtcgcc gctgtcgccc ttttcggcga gccatccagt ggtttctcca 660
204 gcatgttgtg gggcggcggg tcgttgcga caatcggtcc gctgtatagc tctaagacca 720
205 taaacttgtg tgctcccac gatccaatat gcaccggagg cggcaatatt atggcgcac 780
206 tttcgtatgt tcagtcgggg atgacaagcc aggccggcgc attcgcggcg aacaggctcg 840
207 atcacgcccgg atgatcaaag actgttgtcc ctataccgct ggggctgttag tcgatgtaca 900
208 ccggctggaa tctgaagggc aagaaccggg tattcatcag gccggatgaa atgacggctcg 960
209 ggcggtaatc gtttgtgttg aacgcgtaga gccgatcacc gccggggctcg gtgtagacct 1020
210 caatgttgtt gttcgccggc agggttccgg atcc 1054

212 <210> SEQ ID NO: 10
213 <211> LENGTH: 217
214 <212> TYPE: PRT
215 <213> ORGANISM: Mycobacterium tuberculosis
216 <400> SEQUENCE: 10
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219 Thr Leu Ala Leu Val Ser Ala Pro Ala Gly Gly Arg Ala Ala His Ala
220 20 25 30
221 Asp Pro Cys Ser Asp Ile Ala Val Val Phe Ala Arg Gly Thr His Gln
222 35 40 45
223 Ala Ser Gly Leu Gly Asp Val Gly Glu Ala Phe Val Asp Ser Leu Thr
224 50 55 60
225 Ser Gln Val Gly Gly Arg Ser Ile Gly Val Tyr Ala Val Asn Tyr Pro
226 65 70 75 80
227 Ala Ser Asp Asp Tyr Arg Ala Ser Ala Ser Asn Gly Ser Asp Asp Ala
228 85 90 95
229 Ser Ala His Ile Gln Arg Thr Val Ala Ser Cys Pro Asn Thr Arg Ile
230 100 105 110
231 Val Leu Gly Gly Tyr Ser Gln Gly Ala Thr Val Ile Asp Leu Ser Thr
232 115 120 125
233 Ser Ala Met Pro Pro Ala Val Ala Asp His Val Ala Ala Val Ala Leu
234 130 135 140
235 Phe Gly Glu Pro Ser Ser Gly Phe Ser Ser Met Leu Trp Gly Gly Gly
236 145 150 155 160
237 Ser Leu Pro Thr Ile Gly Pro Leu Tyr Ser Ser Lys Thr Ile Asn Leu
238 165 170 175
239 Cys Ala Pro Asp Asp Pro Ile Cys Thr Gly Gly Gly Asn Ile Met Ala
240 180 185 190
241 His Val Ser Tyr Val Gln Ser Gly Met Thr Ser Gln Ala Ala Thr Phe
242 195 200 205
243 Ala Ala Asn Arg Leu Asp His Ala Gly
244 210 215

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248 <212> TYPE: DNA
249 <213> ORGANISM: Mycobacterium tuberculosis
250 <400> SEQUENCE: 11

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